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April 1, 2002

To: Commissioner of Patents and Trademarks
Washington, D.C. 20231

Fr: George O. Saile, Reg. No. 19,572
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Subject:

Serial No. 10/077,064 02/15/02
Min Li et al.

SYNTHETIC PATTERN EXCHANGE
CONFIGURATION FOR SIDE READING
REDUCTION

Grp. Art Unit: 2652

INFORMATION DISCLOSURE STATEMENT

Enclosed is Form PTO-1449, Information Disclosure Citation
In An Application.

The following Patents and/or Publications are submitted to
comply with the duty of disclosure under CFR 1.97-1.99 and
37 CFR 1.56. Copies of each document is included herewith.

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being
deposited with the United States Postal Service as first class
mail in an envelope addressed to: Commissioner of Patents and
Trademarks, Washington, D.C. 20231, on April 10, 2002.

Stephen B. Ackerman, Reg.# 37761

Signature/Date SBQ 4/10/02

The following two U.S. Patents each disclose a magnetically stable spin-valve sensor using either hard magnetic biasing layers or ferromagnetic biasing layers:

- 1) U.S. Patent 6,324,037 to Zhu et al., "Magnetically Stable Spin-Valve Sensor."
- 2) U.S. Patent 6,222,707 to Huai et al., "Bottom or Dual Spin Valve Having a Seed Layer that Results in an Improved Antiferromagnetic Layer."

U.S. Patent 6,322,640 to Xiao et al., "Multiple Thermal Annealing Method for Forming Antiferromagnetic Exchange Biased Magnetoresistive (MR) Sensor Element," discloses a method for forming a double, antiferromagnetically biased GMR sensor, using as the biasing material, a magnetic material having two crystalline phases, one of which couples antiferromagnetically and the other of which does not.

U.S. Patent 6,118,624 to Fukuzawa et al., "Magnetoresistance Effect Element Having a Magnetic Biasing Film," discloses a mechanism for alleviating an adverse pinning effect by use of a hard magnetic biasing film which has a higher saturation magnetism than the free layer being biased.

Sincerely,



Stephen B. Ackerman, Reg. #37761

